

NWS Product Definition Document (PDD) for:
Revalidation of Experimental SPC Enhanced Resolution Thunder Product

Part I - Mission Connection

The Storm Prediction Center is the National Weather Service's center of expertise for forecasting convection, including economically-disruptive weather events such as tornadoes, large hail, damaging winds and heavy rainfall. Included within the severe thunderstorm outlooks is a forecast for a 10% or greater probability of thunderstorms. These thunderstorm forecasts cover a 24 hour period with only the 10% probability contour, and thus provide little in the way of temporal or spatial resolution. The forecast of thunderstorms is critical for the protection of life and property as every thunderstorm contains lightning that is a potential killer.

This Product Description Document replaces the existing PDD, whose evaluation period expired on 1 September 2006 and revises the current experimental SPC thunderstorm guidance product based on customer feedback. The additional temporal and spatial resolution in existing experimental thunderstorm outlooks already provide better lightning forecast guidance for local NWS Weather Forecast Offices, emergency managers, media, and the general public. The revision to be tested this year retains the temporal subdivision of the convective day at 0300 UTC to provide guidance on whether thunderstorms are expected to continue into the overnight hours.

This year's changes are in the distribution of SPC forecaster workload and the examination of the SPC's ability to maintain this product for all scheduled convective outlook times and through the entire winter season.

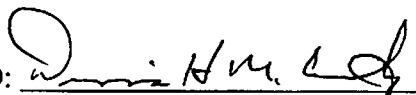
Comments:

This season the SPC will again make the revised enhanced resolution thunderstorm outlooks open to all customers through its web site at <http://www.spc.noaa.gov/products/exper/enhtstm/>. Web feedback from the broader community will be sought via an internet link *beginning on 17 April, 2007 and ending on 15 February 2008.*

Part II - Technical Description

The enhanced thunder product will consist of CONUS Day 1 forecasts for 1200 - 0300 UTC and 0300 - 1200 UTC at 0600 UTC, 1300 UTC, 1630 UTC and 2100 UTC, with only a forecast for 0300 - 1200 UTC produced with 0100 UTC Day 1 Convective Outlook. Each of these products will contain 10%, 40% and 70% contours for the probability of thunderstorms during the forecast period. Similar outlooks have been produced both internally and publicly by the SPC two years and verification indicated these forecasts are skillful and statistical reliability

RECOMMEND: OCWWS Director revalidate the **Enhanced Thunder** products as "experimental."

APPROVED: 

DATE: 3/29/07

DISAPPROVED: _____

DATE: _____